INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

March 1, 2004

TO: Interested Parties / Applicant

RE: Brickcraft, LLC / 021-18273-00054

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

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NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Brickcraft, LLC
200 North SR 59
Center Point, Indiana 47840

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP021-18273-00054	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:March 1, 2004 Expiration Date:March 1, 2009

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary brick manufacturing plant.

Responsible Official:	President
Source Address:	200 North SR 59, Center Point, Indiana 47840
Mailing Address:	P.O. Box 104, Clay City, Indiana 47840
General Source Phone Number:	(812) 939-0184
SIC Code:	3251
County Location:	Clay
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) brick manufacturing line, identified as EU-01, installed in 2004, with a maximum capacity of 9.05 tons of bricks per hour, and consisting of:

(1) one (1) brick dryer, with a maximum capacity of 9.05 tons of bricks per hour, using recycled hot air from the gas-fired kiln, and exhausting through stacks D-1 and CZ-1,

(2) and one (1) natural gas-fired tunnel kiln, rated at 58 million British thermal units per hour, with a maximum capacity of 9.05 tons of bricks per hour, with a dry injection fabric filter (DIFF) for hydrogen fluoride and sulfur dioxide control, and exhausting through stacks POC-1 and UCC-1.

(b) One (1) pre-kiln clay/shale/fireclay/sand processing operation, identified as EU-02, with a maximum capacity of 125 tons of raw material per hour, installed in 2004, using baghouses (BH-1) and (BH-2) as particulate control, and exhausting internally, and consisting of the following equipment:

(1) one (1) primary crushing operation, with a maximum capacity of 125 tons of raw material per hour,

(2) one (1) grinding and screening operation, with a maximum capacity of 125 tons of raw material per hour,

(3) one (1) extruding operation, with a maximum capacity of 60 tons of raw material per hour.

(c) raw material storage piles;

(d) raw material handling;

(e) one (1) enclosed mixing pugmill with a maximum capacity of 60 tons per hour;

(f) one (1) additive feeder with a maximum capacity of 6 tons per hour;

(g) one (1) enclosed surge bin inside with a maximum capacity of 20 tons;

(h) paved and unpaved roads.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6 and 326 IAC 2-2 and an Operation Permit Validation Letter is issued.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

B.8 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.672(a), Subpart OOO, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

(b) Actual start-up date (within 15 days after such date); and

(c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015

Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMP's shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.13 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.14 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), a dust control plan shall be submitted for this source.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant

to 326 IAC 1-7-4.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements

C.8 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.13 Compliance Response Plan - Preparation and Implementation

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan (or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan) under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such

response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten (10) days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(a) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1(32) “Regulated pollutant which is used only for purposes of Section 19 of this rule”) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description 326 IAC 2-5.1-3(c)(2)(C):

(a) One (1) brick manufacturing line, identified as EU-01, installed in 2004, with a maximum capacity of 9.05 tons of bricks per hour, and consisting of:

(1) one (1) brick dryer, with a maximum capacity of 9.05 tons of bricks per hour, using recycled hot air from the gas-fired kiln, and exhausting through stacks D-1 and CZ-1,

(2) and one (1) natural gas-fired tunnel kiln, rated at 58 million British thermal units per hour, with a maximum capacity of 9.05 tons of bricks per hour, with a dry injection fabric filter (DIFF) for hydrogen fluoride and sulfur dioxide control, and exhausting through stacks POC-1 and UCC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 PSD Minor Condition [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the dry injection fabric filter (DIFF) on the one (1) kiln shall be in operation at all times that the kiln is in operation. SO_2 emissions from the kiln shall be controlled using the dry injection fabric filter (DIFF) to less than 249 tons per year. Compliance with the requirement shall make 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Particulate Matter (PM) [40 CFR 60.672]

Pursuant to 40 CFR 60.672 (a), the allowable particulate matter emission rate from both the dryer and the kiln shall be:

(a) limited to 0.022 grains per dry standard cubic foot (gr/dscf) or less, and

(b) visible emissions to be limited to seven percent (7%) or less.

The 0.022 gr/dscf is equivalent to 8.49 pounds per hour and 4.71 pounds per hour for the dryer and the kiln, respectively.

D.1.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facilities described in this section except when otherwise specified in 40 CFR 63 Subpart JJJJJ.

D.1.4 Emissions Standards for Brick and Structural Clay Products Manufacturing [40 CFR Part 63.8405 and Part 63.8410, Subpart JJJJJ] [326 IAC 20]

(a) Pursuant to 40 CFR 63.8405(a), the Permittee must meet each applicable emission limit in Table 1 to this subpart.

(b) Pursuant to 40 CFR 63.8405(b), the Permittee must meet each applicable operating limit in Table 2 to this subpart.

(c) Pursuant to 40 CFR 63.8410, the Permittee shall meet the emission limitations in Tables 1 and 2 to this subpart, by using an emissions capture and collection system and an APCD and demonstrate that the resulting emissions or emissions reductions meet the emission limits

in Table 1 to this subpart, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 to this subpart.

D.1.5 General Compliance Requirements [40 CFR Part 63.8420, Subpart JJJJJ] [326 IAC 20]

Pursuant to 40 CFR 63.8420:

(a) The Permittee must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction and during periods of routine control device maintenance as specified in paragraph (e) of this section.

(b) Except as specified in paragraph (e) of this section, the Permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in Sec. 63.6(e)(1)(i). During the period between the compliance date specified for the affected source in Sec. 63.8395 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, the Permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) The Permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in Sec. 63.6(e)(3).

(d) The Permittee must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in Sec. 63.8425.

(e) If the owner or operator of an affected kiln must perform routine maintenance on the control device for that kiln, the Permittee may bypass the kiln control device and continue operating the kiln upon approval by the Administrator provided the conditions listed in paragraphs (e)(1) through (5) of this section are satisfied.

(1) The Permittee must request a routine control device maintenance exemption from the Administrator. The request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, describe how the Permittee plan to minimize emissions to the greatest extent possible during the maintenance, and provide any other documentation required by the Administrator.

(2) The routine control device maintenance exemption must not exceed 4 percent of the annual operating uptime for each kiln.

(3) The request for the routine control device maintenance exemption, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.

(4) The Permittee must minimize HAP emissions during the period when the kiln is operating and the control device is offline.

(5) The Permittee must minimize the time period during which the kiln is operating and the control device is offline.

(f) The Permittee must be in compliance with the provisions of subpart A of this part, except as noted in Table 7 to this subpart.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the kiln and its control device.

Compliance Determination Requirements

D.1.7 Testing and Initial Compliance Requirements [40 CFR 63.8435, 40 CFR 63.8435, 40 CFR 63.8445 Subpart JJJJJ] [326 IAC 20] [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) The Permittee shall perform testing pursuant to 40 CFR 63.8435, 40 CFR 63.8440 and 40 CFR 63.8445 for the natural gas-fired tunnel kiln.

(b) During the period between 30 to 36 months after issuance of this permit, the Permittee shall perform the following to demonstrate compliance with Condition D.1.2 for the dryer and kiln:

(1) PM testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5 for PM.

(2) Opacity testing utilizing 40 CFR Part 60 Appendix A, Method 9, to demonstrate compliance with the opacity limitation of Condition D.1.2(b).

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Operation, Maintenance, and Monitoring Plans [40 CFR Part 63.8425, Subpart JJJJJ] [326 IAC 20]

Pursuant to 40 CFR 63.8425:

(a) The Permittee must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (b) of this section. The OM&M plan must be available for inspection by the permitting authority upon request.

(b) The OM&M plan must include, as a minimum, the information in paragraphs (b)(1) through (13) of this section.

(1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(3) The limits for each parameter that represent continuous compliance with the emission limitations in Sec. 63.8405. The limits must be based on values of the monitored parameters recorded during performance tests.

(4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.

(5) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).

(6) Performance and equipment specifications for the sample interface, the pollutant

concentration or parametric signal analyzer, and the data collection and reduction system.

(7) Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).

(8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in Sec. Sec. 63.8450 and 63.8(c)(1), (3), (4)(ii), (7), and (8).

(9) Continuous monitoring system data quality assurance procedures consistent with the requirements in Sec. 63.8(d).

(10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in Sec. 63.10(c), (e)(1), and (e)(2)(i).

(11) Procedures for responding to operating parameter deviations, including the procedures in paragraphs (b)(11)(i) through (iii) of this section.

(i) Procedures for determining the cause of the operating parameter deviation.

(ii) Actions for correcting the deviation and returning the operating parameters to the allowable limits.

(iii) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.

(12) Procedures for keeping records to document compliance.

(13) If the Permittee operate an affected kiln and the Permittee plan to take the kiln control device out of service for routine maintenance, as specified in Sec. 63.8420(e), the procedures specified in paragraphs (b)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.

(ii) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.

(c) Changes to the operating limits in the OM&M plan require a new performance test. If the Permittee is revising an operating limit parameter value, the source must meet the requirements in paragraphs (c)(1) and (2) of this section.

(1) Submit a notification of performance test to the Administrator as specified in Sec. 63.7(b).

(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, the Permittee must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under Sec. 63.9(h).

(d) If the Permittee is revising the inspection and maintenance procedures in the OM&M plan, the Permittee do not need to conduct a new performance test.

D.1.9 Monitoring Installation, Operation, and Maintenance Requirements [40 CFR Part 63.8450, Subpart JJJJJ] [326 IAC 20]

Pursuant to 40 CFR 63.8450:

(a) The Permittee must install, operate, and maintain each CMS according to the OM&M plan and the requirements in paragraphs (a)(1) through (5) of this section.

(1) Conduct a performance evaluation of each CMS according to the OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, the Permittee must have at least three of four equally spaced data values (or at least 75 percent if the Permittee collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of- control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in Sec. 63.8420(e)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3- hour average period, the Permittee must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in Sec. 63.8420(e)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this section.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(3) At least semiannually, conduct a flow sensor calibration check.

(c) For each pressure measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer's specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pH measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, the Permittee must meet the requirements in paragraphs (e)(1) through (11) of this section.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the ``Fabric Filter Bag Leak Detection Guidance,'' (EPA-454/R-98-015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Continuous Emission Monitoring. Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the ``Fabric Filter Bag Leak Detection Guidance."

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Record each adjustment.

(11) Record the results of each inspection, calibration, and validation check.

(f) For each lime or chemical feed rate measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this section.

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.

(g) Requests for approval of alternate monitoring procedures must meet the requirements in Sec. 63.8445(i) and 63.8(f).

Compliance with the above monitoring conditions in D.1.9 shall also satisfy the requirements of 40 CFR 64, Compliance Assurance Monitoring for the kiln.

D.1.10 Initial Compliance [40 CFR Part 63.8455, Subpart JJJJJ] [326 IAC 20]

Pursuant to 40 CFR 63.8455:

(a) The Permittee must demonstrate initial compliance with each emission limitation that applies to the source according to Table 4 to this subpart.

(b) The Permittee must establish each site-specific operating limit in Table 2 to this subpart that applies to the source according to the requirements in Sec. 63.8445 and Table 3 to this subpart.

(c) The Permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Sec. 63.8480(e).

D.1.11 Continuous Compliance Requirements [40 CFR Part 63.8465, Subpart JJJJJ]

(a) Pursuant to 40 CFR Part 63.8465:

(1) The Permittee must monitor and collect data according to this section.

(2) Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in Sec. 63.8420(e) when the affected source is operating.

(3) The Permittee may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which the Permittee do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

(b) Pursuant to 40 CFR Part 63.8470:

(1) The Permittee must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to source according to the methods specified in Table 5 to this subpart.

(2) For each affected kiln that is equipped with an APCD that is not addressed in Table 2 to this subpart, or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, the Permittee must demonstrate continuous compliance with each emission limit in Table 1 to this subpart, and each operating limit established as required in Sec. 63.8445(i)(2) according to the methods specified in the approved alternative monitoring procedures request, as described in Sec. 63.8445(i)(1) and 63.8(f).

(3) The Permittee must report each instance in which the source did not meet each emission limit and each operating limit in this subpart that applies to the source. This includes periods of startup, shutdown, malfunction, and routine control device maintenance. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in Sec. 63.8485.

(4) During periods of startup, shutdown, and malfunction, the Permittee must operate according to the SSMP.

(5) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the Permittee demonstrate to the Administrator's satisfaction that the Permittee were operating according to an SSMP that satisfies the requirements of Sec. 63.6(e) and the OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).

(6) Deviations that occur during periods of control device maintenance covered by an approved routine control device maintenance exemption according to Sec. 63.8420(e) are not violations if the Permittee demonstrate to the Administrator's satisfaction that the Permittee were operating in accordance with the approved routine control device maintenance exemption.

(7) The Permittee must demonstrate continuous compliance with the operating limits in

Table 2 to this subpart for visible emissions (VE) from tunnel kilns equipped with DLA, DIFF, or DLS/FF by monitoring VE at each kiln stack according to the requirements in paragraphs (7)(i) through (iii) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A. The Permittee must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A, the Permittee must promptly initiate and complete corrective actions according to the OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, the Permittee may decrease the frequency of Method 22 testing from daily to weekly for that kiln stack. If VE are observed during any weekly test, the Permittee must promptly initiate and complete corrective actions according to the OM&M plan, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time the Permittee may again decrease the frequency of Method 22 testing to a weekly basis.

(iii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A, the Permittee must report these deviations by following the requirements in Sec. 63.8485.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.12 Brick Manufacturing Record Keeping Requirements [40 CFR Part 63, Subpart JJJJJ] [326 IAC 20]

(a) Pursuant to 40 CFR 63.8490, the Permittee must:

(1) Keep the records listed in paragraphs (1)(i) through (iv) of this section.

(i) A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).

(ii) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(iii) Records of performance tests as required in Sec. 63.10(b)(2)(viii).

(iv) Records relating to control device maintenance and documentation of the approved routine control device maintenance exemption, if the Permittee request such an exemption under Sec. 63.8420(e).

(2) Keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to the source.

(3) Maintain the records listed in paragraphs (3)(i) through (vi) of this section.

(i) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(ii) For each deviation of an operating limit parameter value, the date, time, and duration of the deviation, a brief explanation of the cause of the deviation and the corrective action taken, and whether the deviation occurred during a period of startup, shutdown, or malfunction.

(iii) For each affected source, records of production rates on a fired-product basis.

(iv) Records for any approved alternative monitoring or test procedures.

(v) Records of maintenance and inspections performed on the APCD.

(vi) Current copies of the SSMP and OM&M plan, including any revisions, with records documenting conformance.

(b) Pursuant to 40 CFR 63.8495:

(1) Records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).

(2) As specified in Sec. 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(3) The Permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to Sec. 63.10(b)(1). The Permittee may keep the records offsite for the remaining 3 years.

(b) To document compliance with Condition D.1.1, the Permittee shall maintain the records required in Condition D.1.9 (a)(1) through (5) and paragraphs (f)(1) and (2).

D.1.13 Brick Manufacturing Reporting Requirements [40 CFR Part 63, Subpart JJJJJ] [326 IAC 20]

(a) Pursuant to 40 CFR 63.8480, the Permittee shall:

(1) Submit all of the notifications in Sec. Sec. 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply by the dates specified.

(2) As specified in Sec. 63.9(b)(2) and (3), if the Permittee start up the affected source before May 16, 2003, the Permittee must submit an Initial Notification not later than 120 calendar days after May 16, 2003.

(3) As specified in Sec. 63.9(b)(3), if the Permittee start up the new or reconstructed affected source on or after May 16, 2003, the Permittee must submit an Initial Notification not later than 120 calendar days after the source becomes subject to this subpart.

(4) If the Permittee is required to conduct a performance test, the Permittee must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in Sec. 63.7(b)(1).

(5) If the Permittee is required to conduct a performance test as specified in Table 3 to this subpart, the Permittee must submit a Notification of Compliance Status as specified in Sec. 63.9(h) and paragraphs (5)(i) and (ii) of this section.

(i) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 3 to this subpart, the Permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test, according to Sec. 63.10(d)(2).

(ii) In addition to the requirements in Sec. 63.9(h)(2)(i), the Permittee must include the information in paragraphs (5)(ii)(A) and (B) of this section in the Notification of Compliance Status.

(A) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

(B) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in Sec. 63.8450(e).

(6) If the Permittee request a routine control device maintenance exemption according to Sec. 63.8420(e), the Permittee must submit the request for the exemption no later than 30 days before the compliance date.

(b) Pursuant to 40 CFR 63.5(d)(1)(iii), the Permittee shall submit the actual, measured emissions data and other correct information required in 40 CFR 63.5(d)(1)(ii)(H) and (d)(2) for the kiln as soon as available but no later than with the notification of compliance status required in 40 CFR 63.9(h).

(c) Pursuant to 40 CFR 63.8485, the Permittee must

(1) Submit each report in Table 6 to this subpart that applies to the source.

(2) Unless the Administrator has approved a different schedule for submission of reports under Sec. 63.10(a), the Permittee must submit each report by the date in Table 6 to this subpart and as specified in paragraphs (2)(i) through (v) of this section.

(i) The first compliance report must cover the period beginning on the compliance date that is specified for the affected source in Sec. 63.8395 and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if the compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the Permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (2)(i) through (iv) of this section.

(3) The compliance report must contain the information in paragraphs (3)(i) through (vii) of this section.

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) If the Permittee had a startup, shutdown or malfunction during the reporting period and the Permittee took actions consistent with the SSMP and OM&M plan, the compliance report must include the information specified in Sec. 63.10(d)(5)(i).

(v) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in paragraphs (3)(v)(A) through (C) of this section.

(A) The date and time when the control device was shutdown and restarted.

(B) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(C) A statement of whether or not the control device maintenance was included in the approved routine control device maintenance exemption developed as specified in Sec. 63.8420(e). If the control device maintenance was included in the approved routine control device maintenance exemption, then the Permittee must report the information in paragraphs (3)(v)(C)(aa) through (cc) of this section.

(aa) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(bb) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device

maintenance exemption during the current semiannual compliance period and during the previous semiannual compliance period.

(cc) Based on the information recorded under paragraphs (C)(v)(cc)(1) and (2) of this section, compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Eq. 1 of this section.

$$RM = \frac{DT_p + DT_c}{KU_p + KU_c}(100) \qquad \text{(Eq. 1)}$$

Where:

RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance

DTp = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period

DT_c = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period

KU_p = Kiln uptime for the previous semiannual compliance period

KU_c = Kiln uptime for the current semiannual compliance period

(vi) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to the source, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(vii) If there were no periods during which the CMS was out-of- control as specified in the OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(4) For each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where the Permittee are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (3)(i) through (v) and paragraphs (4)(i) and (ii) of this section. This includes periods of startup, shutdown, malfunction, and routine control device maintenance.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(5) For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where the Permittee is using a CMS to comply with the emission limitations in this subpart, the Permittee must include the information in paragraphs (3)(i) through (v) and paragraphs (5)(i) through (xiii) of this section. This includes periods of startup, shutdown, malfunction, and routine control device maintenance.

(i) The total operating time of each affected source during the reporting period.

(ii) The date and time that each malfunction started and stopped.

(iii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(iv) The date, time, and duration that each CMS was out-of-control, including the pertinent information in the OM&M plan.

(v) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during routine control device maintenance covered in the approved routine control device maintenance exemption; or during another period.

(vi) A description of corrective action taken in response to a deviation.

(vii) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(viii) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(ix) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(x) A brief description of the process units.

(xi) A brief description of the CMS.

(xii) The date of the latest CMS certification or audit.

(xiii) A description of any changes in CMS, processes, or control equipment since the last reporting period.

(6) If the Permittee have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, the Permittee must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the Permittee submit a compliance report according to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation the Permittee

may have to report deviations from permit requirements to the permitting authority.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description 326 IAC 2-5.1-3(c)(2)(C):

(b) One (1) pre-kiln clay/shale/fireclay/sand processing operation, identified as EU-02, with a maximum capacity of 125 tons of raw material per hour, installed in 2004, using baghouses (BH-1) and (BH-2) as particulate control, and exhausting internally, and consisting of the following equipment:

(1) one (1) primary crushing operation, with a maximum capacity of 125 tons of raw material per hour,

(2) one (1) grinding and screening operation, with a maximum capacity of 125 tons of raw material per hour,

(3) one (1) extruding operation, with a maximum capacity of 60 tons of raw material per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the grinding and screening operation shall not exceed 53.54 pounds per hour when operating at a process weight rate of 250,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.2.2 PSD Minor Condition [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), PM emissions from grinding and screening operation, shall be limited to 3.125 pounds per hour. Compliance with this limit shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

CONSTRUCTION AND OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Brickcraft, LLC
Address:	200 North SR 59, Center Point, Indiana 47840
City:	Clay
Phone #:	(812) 939-0184
CP #:	021-18273-00054

I hereby certify that Brickcraft, LLC is

? still in operation.
? no longer in operation.

I hereby certify that Brickcraft, LLC is

? in compliance with the requirements of MSOP 021-18273-00054.
? not in compliance with the requirements of MSOP 021-18273-00054.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____R, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____ _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____
_

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____
_

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____
_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

PAGE 1 OF 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

PAGE 2 OF 2

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	Brickcraft, LLC.
Source Location:	200 North SR 59, Center Point, Indiana 47840
County:	Clay
SIC Code:	3251
Operation Permit No.:	MSOP021-18273-00054
Permit Reviewer:	Alic Bent/EVP

On January 26, 2004, the Office of Air Quality (OAQ) had a notice published in the Brazil Times in Brazil, Indiana, stating that Brickcraft, LLC. had applied for a Minor Source Operating Permit (MSOP) for the construction and operation of a brick manufacturing plant. The notice also stated that OAQ proposed to issue a MSOP for this operation and provided information on how the public could review the proposed MSOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this MSOP should be issued as proposed.

Upon further review, the OAQ has decided to make the following change to the Minor Source Operating Permit. Bolded language has been added and the language with a line through it has been deleted.

1. The descriptive information in Sections A.2 (a)(2) and D.1(a)(2) of the permit have been revised to correct the kiln heat rate.

   (a) One (1) brick manufacturing line, identified as EU-01, installed in 2004, with a maximum capacity of 9.05 tons of bricks per hour, and consisting of:

      (1) one (1) brick dryer, with a maximum capacity of 9.05 tons of bricks per hour, using recycled hot air from the gas-fired kiln, and exhausting through stacks D-1 and CZ-1,

      (2) and one (1) natural gas-fired tunnel kiln, rated at ~~5~~6~~.~~**8** million British thermal units per hour, with a maximum capacity of 9.05 tons of bricks per hour, with a dry injection fabric filter (DIFF) for hydrogen fluoride and sulfur dioxide control, and exhausting through stacks POC-1 and UCC-1.

2. A rule cite that was inadvertently omitted from the draft has been added to the permit.

   B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1] **[IC 13-17-3-2]**

3. Condition C.15(b)(3) (now re-numbered C.13(b)(3)) has been updated to the current model language.

C.15~~3~~ Compliance Response Plan – Preparation and Implementation

(b)(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be ten **(**10**)** days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down~~.~~**. The notification shall also include** the status of the applicable compliance monitoring parameter with respect to normal, and the results of the **response** actions taken up to the time of notification.

4. Sections C.13 through C.20 have been re-numbered as C.11 through C.18 to correct a numbering error.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	**Brickcraft, LLC**
Source Location:	**200 North SR 59, Center Point, IN 47840**
County:	**Clay**
SIC Code:	**3251**
Operation Permit No.:	**MSOP021-18273-00054**
Permit Reviewer:	**Alic Bent/EVP**

The Office of Air Quality (OAQ) has reviewed an application from Brickcraft, LLC relating to the construction and operation of a stationary brick manufacturing plant.

History

Brickcraft, LLC submitted an application on October 21, 2003 for the construction and operation of a new source to be located at 200 North SR 59, Center Point, Indiana.

Permitted Emission Units and Pollution Control Equipment

This is an initial approval, and no previous permits, registrations, modifications, or exemptions have been issued to this source.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following emission units and pollution control devices:

(a) One (1) brick manufacturing line, identified as EU-01, to be installed in 2004, with a maximum capacity of 9.05 tons of bricks per hour, and consisting of:

(1) one (1) brick dryer, with a maximum capacity of 9.05 tons of bricks per hour, using recycled hot air from the gas-fired kiln, and exhausting through stacks D-1 and CZ-1,

(2) and one (1) natural gas-fired tunnel kiln, rated at 56 million British thermal units per hour, with a maximum capacity of 9.05 tons of bricks per hour, with a dry injection

fabric filter (DIFF) for hydrogen fluoride and sulfur dioxide control, and exhausting through stacks POC-1 and UCC-1.

(b) One (1) pre-kiln clay/shale/fireclay/sand processing operation, identified as EU-02, with a maximum capacity of 125 tons of raw material per hour, to be installed in 2004, using baghouses (BH-1) and (BH-2) as particulate control, and exhausting internally, and consisting of the following equipment:

(1) one (1) primary crushing operation, with a maximum capacity of 125 tons of raw material per hour,

(2) one (1) grinding and screening operation, with a maximum capacity of 125 tons of raw material per hour,

(3) one (1) extruding operation, with a maximum capacity of 60 tons of raw material per hour.

(c) raw material storage piles;

(d) raw material handling;

(e) one (1) enclosed mixing pugmill with a maximum capacity of 60 tons per hour;

(f) one (1) additive feeder with a maximum capacity of 6 tons per hour;

(g) one (1) enclosed surge bin inside with a maximum capacity of 20 tons;

(h) paved and unpaved roads.

Existing Approvals

This new source has no existing approvals.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
POC-1	Kiln	44	3.0	25,000	350
UCC-1	Kiln	44	2.0	10,000	300
D-1	Dryer	44	4.0	45,000	105
CZ-1	Dryer	44	3.0	20,000	350

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit (MSOP) be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete MSOP application for the purposes of this review was received on October 21, 2003.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A: pages 1 through 2 of this document for detailed emissions calculations.

Unrestricted Potential Emissions

This table reflects the unrestricted PTE.

Pollutant	Potential To Emit (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	greater than 250
VOC	less than 100
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Benzene	less than 10
HCl	less than 10
HF	greater than 10
Lead	less than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO_2 is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

This is a new source and no previous emission data has been received from the source.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Potential to Emit (tons/year)							
Process/ facility	PM	PM-10	SO_2	VOC	CO	NO_X	Single HAP	Total HAPs
EU-01	17.72	14.15	169.65 (1)	1.98	59.86	17.83	3.09 (2)	3.62
Primary Crushing (3)	0.001	0.001	--	--	---	--	--	--
Extruding (3)	0.002	0.002	169.65 (1)	1.98	59.86	17.83	3.09 (2)	3.62
Grinding and Screening (3)	0.027	0.027	--	--	--	--	--	--
Total Emissions	17.75	14.18	169.65	1.98	59.86	17.83	3.09	3.62

(1) SO_2 controlled to less than 250 tons per year, using a dry injection fabric filter.
(2) HF controlled to less than 10 tons per year, using a dry injection fabric filter pursuant to Subpart JJJJJ.
(3) After control emissions.

County Attainment Status

The source is located in Clay County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Clay County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Clay County has been classified as attainment or unclassifiable for all other pollutants.

Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,
(b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or
(c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

(a) This source is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.672, Subpart OOO because it meets the definition of a nonmetallic mineral processing plant pursuant to the rule and it was constructed after August 31, 1983. Part (a) of the rule, which applies to stack emissions from nonmetallic mineral processing facilities, requires:

(1) particulate emissions discharged from the affected facilities to the atmosphere to be limited to 0.022 grains per dry standard cubic foot (gr/dscf) or less, and

(2) visible emissions discharged from the affected facilities to the atmosphere to be limited to seven percent (7%) or less.

The pre-kiln clay/shale/fireclay/sand processing operation (EU-02), consisting of the primary crushing operation, grinding and screening operation, and extruding operation, exhausts inside the building. Therefore, EU-02 is not subject to the requirements of this rule.

Emissions from the dryer and kiln discharge through stacks into the atmosphere and are subject to the requirements of this rule.

The 0.022 gr/dscf is equivalent to a maximum particulate matter emission rate of 8.49 pounds per hour and 4.71 pounds per hour for the dryer and kiln, respectively. The uncontrolled PTE PM from the dryer and kiln is 0.697 and 3.35 pounds per hour, respectively, based on the maximum stack exhaust rate of each facility. Therefore, the dryer and kiln are in compliance with the rule. (see Appendix A, page 1 of 2, for detailed calculations).

(b) The kiln operation is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as only the calcining and drying of raw materials prior to firing of the brick are covered under this subpart. The drying operation at the source is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.730 through 60.737, Subpart UUU, as the dryer is for drying bricks and not drying raw materials.

(c) The provisions of 40 CFR 63.5, preconstruction review and notification requirements, apply to the kiln, because it is a new affected source for 40 CFR 63, Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing, and it is a major-emitting affected source. An approval letter was issued pursuant to 40 CFR 63.5(e). Since the Permittee relied upon estimated information to complete the application requirements of 40 CFR 63.5(d)(1)(ii)(H) and (d)(2), the Permittee is required to submit actual, measured data and other information required by 40 CFR 63.5(d)(1)(ii)(H) and (d)(2) for the kiln as soon as available but no later than with the notification of compliance status.

This source is required to comply with this subpart upon initial startup.

(1) Pursuant to 40 CFR 63.8405(a), the Permittee must meet each applicable emission limit in Table 1 to this subpart.

(2) Pursuant to 40 CFR 63.8405(b), the Permittee must meet each applicable operating limit in Table 2 to this subpart.

(3) Pursuant to 40 CFR 63.8410, the Permittee shall meet the emission limitations in Tables 1 and 2 to this subpart, by using an emissions capture and collection system and an air pollution control device (APCD) and demonstrate that the resulting emissions or emissions reductions meet the emission limits in Table 1 to this subpart, and that the capture and collection system and APCD meet the applicable operating limits in Table 2 to this subpart.

(4) General Compliance Requirements

Pursuant to 40 CFR 63.8420, the general requirements for complying with this subpart are:

(A) The Permittee must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction and during periods of routine control device maintenance as specified in paragraph (e) of this section.

(B) Except as specified in paragraph (E) of this section, the Permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in Sec. 63.6(e)(1)(i). During the period between the compliance date specified for the affected source in Sec. 63.8395 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, the Permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(C) The Permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in Sec. 63.6(e)(3).

(D) The Permittee must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in Sec. 63.8425.

(E) If the owner or operator of an affected kiln must perform routine maintenance on the control device for that kiln, the Permittee may bypass the kiln control device and continue operating the kiln upon approval by the Administrator provided the conditions listed in paragraphs (E)(i) through (v) of this section are satisfied.

(i) The Permittee must request a routine control device maintenance exemption from the Administrator. The request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, describe how the Permittee plan to minimize

emissions to the greatest extent possible during the maintenance, and provide any other documentation required by the Administrator.

(ii) The routine control device maintenance exemption must not exceed 4 percent of the annual operating uptime for each kiln.

(iii) The request for the routine control device maintenance exemption, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.

(iv) The Permittee must minimize HAP emissions during the period when the kiln is operating and the control device is offline.

(v) The Permittee must minimize the time period during which the kiln is operating and the control device is offline.

(F) The Permittee must be in compliance with the provisions of subpart A of this part, except as noted in Table 7 to this subpart.

(5) Pursuant to 40 CFR 63.8425:

(A) The Permittee must prepare, implement, and revise as necessary an OM&M plan that includes the information in paragraph (B) of this section. The OM&M plan must be available for inspection by the permitting authority upon request.

(B) The OM&M plan must include, as a minimum, the information in paragraphs (B)(i) through (xiii) of this section.

(i) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(ii) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(iii) The limits for each parameter that represent continuous compliance with the emission limitations in Sec. 63.8405. The limits must be based on values of the monitored parameters recorded during performance tests.

(iv) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.

(v) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).

(vi) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

(vii) Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).

(viii) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in Sec. Sec. 63.8450 and 63.8(c)(1), (3), (4)(ii), (7), and (8).

(ix) Continuous monitoring system data quality assurance procedures consistent with the requirements in Sec. 63.8(d).

(x) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in Sec. 63.10(c), (e)(1), and (e)(2)(i).

(xi) Procedures for responding to operating parameter deviations, including the procedures in paragraphs (B)(xi)(aa) through (cc) of this section.

(aa) Procedures for determining the cause of the operating parameter deviation.

(bb) Actions for correcting the deviation and returning the operating parameters to the allowable limits.

(cc) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.

(xii) Procedures for keeping records to document compliance.

(xiii) If the Permittee operate an affected kiln and the Permittee plan to take the kiln control device out of service for routine maintenance, as specified in Sec. 63.8420(e), the procedures specified in paragraphs (B)(xiii)(aa) and (bb) of this section.

(aa) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.

(bb) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.

(C) Changes to the operating limits in the OM&M plan require a new performance test. If the Permittee is revising an operating limit parameter value, the source must meet the requirements in paragraphs (C)(i) and (ii) of this section.

(i) Submit a notification of performance test to the Administrator as specified in Sec. 63.7(b).

(ii) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, the Permittee must submit the

performance test results and the revised operating limits as part of the Notification of Compliance Status required under Sec. 63.9(h).

(D) If the Permittee is revising the inspection and maintenance procedures in the OM&M plan, the Permittee do not need to conduct a new performance test.

(6) Initial Compliance

Pursuant to 40 CFR 63.8455:

(A) The Permittee must demonstrate initial compliance with each emission limitation that applies to the source according to Table 4 to this subpart.

(B) The Permittee must establish each site-specific operating limit in Table 2 to this subpart that applies to the source according to the requirements in Sec. 63.8445 and Table 3 to this subpart.

(C) The Permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Sec. 63.8480(e).

(7) Notifications, Reports, and Records

Pursuant to 40 CFR 63.8480, the Permittee shall:

(A) Submit all of the notifications in Sec. 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply by the dates specified.

(B) As specified in Sec. 63.9(b)(2) and (3), if the Permittee start up the affected source before May 16, 2003, the Permittee must submit an Initial Notification not later than 120 calendar days after May 16, 2003.

(C) As specified in Sec. 63.9(b)(3), if the Permittee start up the new or reconstructed affected source on or after May 16, 2003, the Permittee must submit an Initial Notification not later than 120 calendar days after the source becomes subject to this subpart.

(D) If the Permittee is required to conduct a performance test, the Permittee must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in Sec. 63.7(b)(1).

(E) If the Permittee is required to conduct a performance test as specified in Table 3 to this subpart, the Permittee must submit a Notification of Compliance Status as specified in Sec. 63.9(h) and paragraphs (E)(i) and (ii) of this section.

(i) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 3 to this subpart, the Permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test, according to Sec. 63.10(d)(2).

(ii) In addition to the requirements in Sec. 63.9(h)(2)(i), the Permittee must include the information in paragraphs (E)(ii)(aa) and (bb) of this section in the Notification of Compliance Status.

(aa) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.

(bb) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in Sec. 63.8450(e).

(F) If the Permittee request a routine control device maintenance exemption according to Sec. 63.8420(e), the Permittee must submit the request for the exemption no later than 30 days before the compliance date.

Pursuant to 40 CFR 63.5(d)(1)(iii), the Permittee shall submit the actual, measured emissions data and other correct information required in 40 CFR 63.5(d)(1)(ii)(H) and (d)(2) for the kiln as soon as available but no later than with the notification of compliance status required in 40 CFR 63.9(h).

(8) Reporting Requirements

Pursuant to 40 CFR 63.8485, the Permittee must

(A) Submit each report in Table 6 to this subpart that applies to the source.

(B) Unless the Administrator has approved a different schedule for submission of reports under Sec. 63.10(a), the Permittee must submit each report by the date in Table 6 to this subpart and as specified in paragraphs (B)(i) through (v) of this section.

(i) The first compliance report must cover the period beginning on the compliance date that is specified for the affected source in Sec. 63.8395 and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if the compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iv) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(v) For each affected source that is subject to permitting regulations

pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the Permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (B)(i) through (iv) of this section.

(C) The compliance report must contain the information in paragraphs (C)(i) through (vii) of this section.

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) If the Permittee had a startup, shutdown or malfunction during the reporting period and the Permittee took actions consistent with the SSMP and OM&M plan, the compliance report must include the information specified in Sec. 63.10(d)(5)(i).

(v) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in paragraphs (C)(v)(aa) through (cc) of this section.

(aa) The date and time when the control device was shutdown and restarted.

(bb) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(cc) A statement of whether or not the control device maintenance was included in the approved routine control device maintenance exemption developed as specified in Sec. 63.8420(e). If the control device maintenance was included in the approved routine control device maintenance exemption, then the Permittee must report the information in paragraphs (C)(v)(cc)(1) through (3) of this section.

(1) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(2) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance exemption

during the current semiannual compliance period and during the previous semiannual compliance period.

(3) Based on the information recorded under paragraphs (C)(v)(cc)(1) and (2) of this section, compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Eq. 1 of this section.

$$RM = \frac{DT_p + DT_c}{KU_p + KU_c}(100) \qquad \text{(Eq. 1)}$$

Where:

RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance

DTp = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period

DT_c = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period

KU_p = Kiln uptime for the previous semiannual compliance period

KU_c = Kiln uptime for the current semiannual compliance period

(vi) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to the source, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(vii) If there were no periods during which the CMS was out-of- control as specified in the OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(D) For each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where the Permittee are not using a CMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (C)(i) through (v) and paragraphs (D)(i) and (ii) of this section. This includes periods of startup, shutdown, malfunction, and routine control device maintenance.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(E) For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where the Permittee is using a CMS to comply with the emission limitations in this subpart, the Permittee must include the information in paragraphs (C)(i) through (v) and paragraphs (E)(i) through (xiii) of this section. This includes periods of startup, shutdown, malfunction, and routine control device maintenance.

(i) The total operating time of each affected source during the reporting period.

(ii) The date and time that each malfunction started and stopped.

(iii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(iv) The date, time, and duration that each CMS was out-of-control, including the pertinent information in the OM&M plan.

(v) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during routine control device maintenance covered in the approved routine control device maintenance exemption; or during another period.

(vi) A description of corrective action taken in response to a deviation.

(vii) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(viii) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(ix) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(x) A brief description of the process units.

(xi) A brief description of the CMS.

(xii) The date of the latest CMS certification or audit.

(xiii) A description of any changes in CMS, processes, or control equipment since the last reporting period.

(F) If the Permittee have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, the Permittee must report all deviations as defined

in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the Permittee submit a compliance report according to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation the Permittee may have to report deviations from permit requirements to the permitting authority.

(9) Recordkeeping Requirements

Pursuant to 40 CFR 63.8490, the Permittee must:

(A) Keep the records listed in paragraphs (A)(i) through (iv) of this section.

(i) A copy of each notification and report that is submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).

(ii) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(iii) Records of performance tests as required in Sec. 63.10(b)(2)(viii).

(iv) Records relating to control device maintenance and documentation of the approved routine control device maintenance exemption, if the Permittee request such an exemption under Sec. 63.8420(e).

(B) Keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to the source.

(C) Maintain the records listed in paragraphs (C)(i) through (vi) of this section.

(i) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.

(ii) For each deviation of an operating limit parameter value, the date, time, and duration of the deviation, a brief explanation of the cause of the deviation and the corrective action taken, and whether the deviation occurred during a period of startup, shutdown, or malfunction.

(iii) For each affected source, records of production rates on a fired-product basis.

(iv) Records for any approved alternative monitoring or test procedures.

(v) Records of maintenance and inspections performed on the APCD.

(vi) Current copies of the SSMP and OM&M plan, including any revisions, with records documenting conformance.

Pursuant to 40 CFR 63.8495:

(A) Records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).

(B) As specified in Sec. 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(C) The Permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to Sec. 63.10(b)(1). The Permittee may keep the records offsite for the remaining 3 years.

(d) This Part 70 source does include a pollutant-specific emissions unit as defined in 40 CFR 64.1 for SO_2:

(1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year of SO_2; and

(2) that is subject to an emission limitation for SO_2 and has a control device that is necessary to meet that limit.

The kiln at this Part 70 source has an uncontrolled PTE of SO_2 of greater than 100 tons per year, and uses a dry injection fabric filter (DIFF) to control SO_2 emissions to less than 250 tons per year to render 326 IAC 2-2 (PSD) not applicable. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are applicable to this source.

The following CAM plan, which was submitted by the source, shall satisfy the 40 CFR 64 Compliance Assurance Monitoring requirements.

The Permittee shall comply with the requirements in Condition D.1.9 (a)(1) through (5) and paragraphs (f)(1) and (2).

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is a new construction, and is not subject to 326 IAC 2-2 (PSD) since it is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and its sourcewide emissions is controlled below the major source threshold of 250 tons of SO_2 emissions per twelve (12) consecutive month period. Therefore, the PSD rules, 326 IAC 2-2, will not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Pursuant to 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The natural gas-fired tunnel kiln is subject to the National Emissions Standards for Hazardous Air Pollutants 40 CFR Part 63, Subpart JJJJJ. Compliance with 40 CFR Part 63, Subpart JJJJJ will satisfy the requirements of 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more

than one hundred (100) tons per year) of SO_2. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emissions Limitations)

This source is subject to 326 IAC 6-5, for fugitive particulate matter emissions. Pursuant to 326 IAC 6-5, for any new source which has not received all the necessary preconstruction approvals before December 13, 1985, a fugitive dust control plan must be submitted, reviewed and approved.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) The dryer and kiln are not subject to the requirements of 326 IAC 6-3-2. This rule does not apply if the limitation established in the rule is not consistent with applicable limitations in 326 IAC 12, 40 CFR 60, Subpart OOO. Since the applicable PM limits established by 326 IAC 12, 40 CFR 60, Subpart OOO, are less than the PM limits that would be established by 326 IAC 6-3-2, the more stringent limits apply and the limits pursuant to 326 IAC 6-3-2 do not apply.

(b) Pursuant to 326 IAC 6-3-1(b)(14), the pre-kiln clay/shale/fireclay/sand processing operation (EU-02) which includes:

(1) one (1) primary crushing operation

(2) one (1) extruding operation

is exempt from 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because potential emissions from each of these facilities are less than 0.551 pound per hour.

(c) The one (1) grinding and screening operation is subject to this rule. Pursuant to 326 IAC 6-3-2)(e) (Particulate Emission Limitations for Manufacturing Processes), the particulate from the one (1) grinding and screening operation at the source shall be limited as follows:

Emissions from this facility shall not exceed 53.54 pounds per hour when operating at a process weight rate of 250,000 pounds per hour of raw shale (equivalent to 125 tons per hour).

The above limitations are based on the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

According to the emission calculations (See Appendix, page 2 of 2), the PTE PM before controls from the one (1) grinding and screening operation is 3.125 pounds per hour. Therefore, the grinding and screening operation is in compliance with the requirements without the use of the baghouse.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

The source is not subject to this rule. This rule requires all facilities with a potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide to comply with the emission limitations and test compliance methods stated in the rule. The kiln at this source has the potential to emit twenty-five (25) tons per year and ten (10) pounds per hour of sulfur dioxide. Natural gas is the only fuel used at the source. There are no limits under this rule for natural gas combustion or for non-combustion sources of sulfur dioxide. Therefore, this rule does not apply.

Testing Requirements

(a) Testing is required pursuant to 40 CFR 63.8435, 40 CFR 63.8440 and 40 CFR 63.8445 for the natural gas-fired tunnel kiln.

(b) During the period between 30 to 36 months after issuance of this permit, the Permittee shall perform the following to demonstrate compliance with Condition D.1.2 for the dryer and kiln:

(1) PM testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5 for PM.

(2) Opacity testing utilizing 40 CFR Part 60 Appendix A, Method 9, to demonstrate compliance with the opacity limitation of Condition D.1.2(b).

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.

(c) Sulfur dioxide (SO_2) testing on the kiln is not required since the emission factor used in the emissions calculation was determined using mass balance and assumed 100% conversion of sulfur to sulfur dioxide.

Compliance Requirements

Permits issued under 326 IAC 2-5.1 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-5.1-3(e). As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The uncontrolled PTE PM from the primary crushing operation, grinding and screening operation and extruding operation are each less than five (5) tons per year. Therefore, there are no compliance monitoring conditions for primary crushing operation, grinding and screening operation, and extruding operation.

The grinding and screening operation does not require the use of the baghouse to be in compliance with the 326 IAC 6-3-2 allowable limit and does not have actual emissions exceeding 25 tons per year. Therefore, there are no compliance monitoring conditions for the grinding and screening operation.

The dryer has no control device and does not have actual emissions exceeding 25 tons per year. Therefore, there are no compliance monitoring conditions for the dryer.

The compliance monitoring requirements applicable to the one (1) natural gas-fired tunnel kiln are as follows:

Continuous Compliance

(a) Pursuant to 40 CFR Part 63.8465:

(1) The Permittee must monitor and collect data according to this section.

(2) Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in Sec. 63.8420(e) when the affected source is operating.

(3) The Permittee may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which the Permittee do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

(b) Pursuant to 40 CFR Part 63.8470:

(1) The Permittee must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to source according to the methods specified in Table 5 to this subpart.

(2) For each affected kiln that is equipped with an APCD that is not addressed in Table

2 to this subpart, or that is using process changes as a means of meeting the emission limits in Table 1 to this subpart, the Permittee must demonstrate continuous compliance with each emission limit in Table 1 to this subpart, and each operating limit established as required in Sec. 63.8445(i)(2) according to the methods specified in the approved alternative monitoring procedures request, as described in Sec. 63.8445(i)(1) and 63.8(f).

(3) The Permittee must report each instance in which the source did not meet each emission limit and each operating limit in this subpart that applies to the source. This includes periods of startup, shutdown, malfunction, and routine control device maintenance. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in Sec. 63.8485.

(4) During periods of startup, shutdown, and malfunction, the Permittee must operate according to the SSMP.

(5) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the Permittee demonstrate to the Administrator's satisfaction that the Permittee were operating according to an SSMP that satisfies the requirements of Sec. 63.6(e) and the OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).

(6) Deviations that occur during periods of control device maintenance covered by an approved routine control device maintenance exemption according to Sec. 63.8420(e) are not violations if the Permittee demonstrate to the Administrator's satisfaction that the Permittee were operating in accordance with the approved routine control device maintenance exemption.

(7) The Permittee must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel kilns equipped with DLA, DIFF, or DLS/FF by monitoring VE at each kiln stack according to the requirements in paragraphs (7)(i) through (iii) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A. The Permittee must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A, the Permittee must promptly initiate and complete corrective actions according to the OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, the Permittee may decrease the frequency of Method 22 testing from daily to weekly for that kiln stack. If VE are observed during any weekly test, the Permittee must promptly initiate and complete corrective actions according to the OM&M plan, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time the Permittee may again decrease the frequency of Method 22 testing to a weekly basis.

(iii) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A, the Permittee must report these deviations by following

the requirements in Sec. 63.8485.

Monitoring Installation, Operation, and Maintenance Requirements

Pursuant to 40 CFR 63.8450:

(a) The Permittee must install, operate, and maintain each CMS according to the OM&M plan and the requirements in paragraphs (a)(1) through (5) of this section.

(1) Conduct a performance evaluation of each CMS according to the OM&M plan.

(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, the Permittee must have at least three of four equally spaced data values (or at least 75 percent if the Permittee collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of- control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in Sec. 63.8420(e)).

(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3- hour average period, the Permittee must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in Sec. 63.8420(e)).

(4) Record the results of each inspection, calibration, and validation check.

(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) For each liquid flow measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (b)(1) through (3) of this section.

(1) Locate the flow sensor in a position that provides a representative flowrate.

(2) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the liquid flowrate.

(3) At least semiannually, conduct a flow sensor calibration check.

(c) For each pressure measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (c)(1) through (7) of this section.

(1) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check the pressure tap daily to ensure that it is not plugged.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Any time the sensor exceeds the manufacturer's specified maximum operating pressure range, conduct calibration checks or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each pH measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (d)(1) through (4) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(4) At least monthly, inspect all components for integrity and all electrical connections for continuity.

(e) For each bag leak detection system, the Permittee must meet the requirements in paragraphs (e)(1) through (11) of this section.

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the ``Fabric Filter Bag Leak Detection Guidance,'' (EPA-454/R-98-015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Continuous Emission Monitoring. Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(3) The bag leak detection system sensor must provide an output of relative PM loadings.

(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

(8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the ``Fabric Filter Bag Leak Detection Guidance."

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in the OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Record each adjustment.

(11) Record the results of each inspection, calibration, and validation check.

(f) For each lime or chemical feed rate measurement device, the Permittee must meet the requirements in paragraphs (a)(1) through (5) and paragraphs (f)(1) and (2) of this section.

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.

(g) Requests for approval of alternate monitoring procedures must meet the requirements in Sec. 63.8445(i) and 63.8(f).

These monitoring conditions are necessary because the baghouse for the natural gas-fired tunnel kiln must operate properly to ensure compliance with Subpart JJJJJ (National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing), Subpart OOO (Nonmetallic Mineral Processing Plants) and 326 IAC 2-7 (Part 70).

Conclusion

The construction and operation of this brick manufacturing plant shall be subject to the conditions of the attached proposed Minor Source Operating Permit No. 021-18273-00054.

Appendix A: Brick Dryer and Kiln

Company Name: Brickcraft, LLC
Address City IN Zip: 200 North SR 59, Center Point, IN 47840
MSOP: 021-18273-00054
Reviewer: Alic Bent/EVP
Date: 11-Nov-03

Emission Unit EU-01

Potential Emissions (tons/year)					
Brick Dryer					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission (tons/yr)	Control Efficiency (%)	Controlled Emission (tons/yr)
PM	9.05	0.07700	3.05	0.00%	3.05
PM10	9.05	0.07700	3.05	0.00%	3.05
SO2	9.05	0.00000	0.00	0.00%	0.00
NOx	9.05	0.10000	3.96	0.00%	3.96
VOC	9.05	0.03000	1.19	0.00%	1.19
CO	9.05	0.31000	12.29	0.00%	12.29
Kiln					
PM	9.05	0.37000	14.67	0.00%	14.67
PM10	9.05	0.28000	11.10	0.00%	11.10
SO2 (1)	9.05	10.70000	424.14	60.00%	169.65
NOx	9.05	0.35000	13.87	0.00%	13.87
VOC	9.05	0.02000	0.79	0.00%	0.79
CO	9.05	1.20000	47.57	0.00%	47.57
Benzene	9.05	0.00300	0.12	0.00%	0.12
Lead	9.05	0.00020	0.01	0.00%	0.01
HCl	9.05	0.01000	0.40	0.00%	0.40
HF	9.05	0.78000	30.92	90.00%	3.09

Notes:
1. Emission Factor for SO2 taken from Mass Balance.
2. Kiln will operate on natural gas, with no backup fuel.
3. Emission Factors from Fire Version 6.23, Brick Manufacturing, 3-05-003-11 and 3-05-003-51.
4. Potential emissions based on 8,760 hours per year operation.
5. SO2 and HF emissions controlled by scrubber to less than 250 and less than 10 tons per year, respectively.
6. Emission Factor for HF taken from mass balance.

Appendix A: Process Particulate Emissions

Company Name: Brickcraft, LLC
Address City IN Zip: 200 North SR 59, Center Point, IN 47840
CP: 021-18273-00054
Reviewer: Alic Bent/EVP
Date: 11-Nov-03

Emission Unit EU-02

Potential Emissions (tons/year)					
Primary Crusher (2)					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission (tons/yr)	Control Efficiency (%)	Controlled Emission (tons/yr)
PM	125.00	0.00060	0.329	99.80%	0.001
PM10	125.00	0.00060	0.329	99.80%	0.001

Grinding and Screening (3)					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission (tons/yr)	Control Efficiency (%)	Controlled Emission (tons/yr)
PM	125.00	0.02500	13.688	99.80%	0.027
PM10	125.00	0.00230	13.688	99.80%	0.027

Extrusion (2)					
Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/ton)	Uncontrolled Emission (tons/yr)	Control Efficiency (%)	Controlled Emission (tons/yr)
PM	60.00	0.00360	0.946	99.80%	0.002
PM10	60.00	0.00360	0.946	99.80%	0.002

Notes:
1. Emission Factors from Fire Version 6.23, Brick Manufacturing, 3-05-003-02.
2. With Fabric Filter.
3. Dry Material 6-10% moisture.
4. Potential emissions based on 8,760 hours per year operation.
5. While the maximum capacity of EU-02 is 125 tons per hour, the line is limited by the maximum capacity of 9.05 tons per hour as the dryer and kiln can only handle 9.05 tons of brick per hour